- 1. Фармакокинетические характеристики препаратов Medac и Веро отличаются, что может сказываться на терапевтической эффективности.
- 2. Для полной картины необходимо определение активности аспарагиназы в сыворотке пациента на 3 сутки после введения препарата.

# Список литературы:

- 1. Barbara A. Asparaginase pharmacokinetics and implications of therapeutic drug monitoring / Barbara A., Carmelo R// Leukemia & Lymphoma. 2015
- 2. Carmelo R.Consensus expert recommendations for identification and management of asparaginase hypersensitivity and silent in activation / Carmelo R., Escherich G., GoulUen N.,MonUelaers V., Ue Toledo J.S., Silverman L.D., James A. Whitlock // Hae matologica. -2016. -P.279-285
- 3. Cecconello DK.Monitoring asparaginase activity in middle-income countries / Cecconello DK, Werlang ICR, Alegretti AP. // Lancet oncol. − 2018. №19. − P.1149-1150
- 4. Fernandez C.High-throughput asparaginase activity assay in serum of children with leukemia. /Fernandez C.,Cai X., ElozoryA., Liu C., Panetta J.C. //Int J ClinExpMed. -2013. N015 P.478-487
- 5. MorenoCury N. Low Bioavailability and High Immunogenicity of a New Brand of E. coliL-Asparaginase with Active Host Contaminating Proteins/ Moreno CuryN.,AparecidaMendes-Silva R., Gozzo F.C.,Otavio de Campos-Lima P., Yunes J.A., Brandalise S.R.// . EBioMedicine. − 2018. №30 − P.158-66

УДК: 616.36-002.1

# Сметанина О.В., Кузьминых Д.А., Мацкевич Е.Э. ПРОБЛЕМА ОСВЕДОМЛЕННОСТИ СОВРЕМЕННОЙ МОЛОДЕЖИ РАЗНЫХ СТРАН О МЕТОДАХ ПРОФИЛАКТИКИ ГЕПАТИТА В

Кафедра иностранных языков Приволжский исследовательский медицинский университет Нижний Новгород, Российская Федерация

# Smetanina O.V., Kuzminykh D.A., Matskevich E.E. THE PROBLEM OF AWARENESS AMONG YOUNG PEOPLE FROM DIFFERENT COUNTRIES OF PREVENTIVE AGAINST HEPATITIS B

Department of Foreign Languages Privolzhsky Research Medical University Nizhny Novgorod, Russian Federation

E-mail: rector@pimunn.ru

**Аннотация.** В статье рассмотрена проблема осведомленности русских и немецких студентов о путях передачи и методах профилактики гепатита В. Освещена проблема отношения молодежи к вакцинации как наиболее

эффективному способу профилактики. Приведены результаты анкетирования на данную тему среди студентов.

**Annotation.** The article deals with the problem of the awareness among Russian and German students about the ways of transmission and preventive measures of hepatitis B. The problem of young people's attitude to the vaccination as the most effective method of the prevention is highlighted. The results of the survey on this topic among students are presented.

Ключевые слова: Гепатит В, профилактика, вакцинация.

**Key words:** Hepatitis B, preventive, vaccination.

#### Relevance

Viral hepatitis B is a major medical and social problem for health care in both the Russian Federation [1] and the entire world [3]. Europe has traditionally been the area with the lowest incidence of hepatitis B compared to other regions of the world. According to the World Health Organization (WHO) data, the incidence of hepatitis B in 2015 in Russia was 2.9%, and in Germany 0.7%. Currently strategies have been developed to combat sexually transmitted infections, HIV infection and viral hepatitis [4], which pay special attention to prevention measures for these diseases. The effectiveness of preventive measures is largely determined by sufficient knowledge about the ways of the infection transmission and compliance of the population. Hepatitis B is transmitted by accidental needle injection, tattooing, piercing, and contact with infected blood and body fluids, including saliva, menstrual and vaginal secretions, and seminal fluid. The risk groups often include young people, so the attitude of young people to this problem was considered. The particular importance is the attitude of young people to the vaccination as the main measure to combat hepatitis B [2].

The aim of the study - 1) to assess the awareness of two groups of the respondents (Russian and German students) about the prevention of hepatitis B;

2) to establish a link between the incidence of hepatitis B and the awareness of young people as a high-risk group about the prevention of this disease.

## Materials and methods

The questionnaire survey was used as a research method. This method has the following advantages: the speed of obtaining the necessary information, the possibility of organizing mass surveys. The survey was conducted anonymously using an online platform. Before the mass survey, the questionnaire was tested. Subjects for this study were taken from a cohort of young people. The age of the respondents ranged from 21 to 27. Sample: 30 people. The subjects were divided into two groups: Russian students (Nizhny Novgorod) and German students (Essen). 20 respondents were excluded from the study: the array of German students was limited, so 20 participants were excluded from the group of Russian students by randomization. Thus, two equal samples were formed. For these purposes the Microsoft Excel analysis package "random number generator" was used. The study

had been conducting within two weeks. As the main method of statistical analysis, the comparing average values were used.

The questionnaire has included the following questions:

- 1. Do you think you have enough knowledge about the prevention of socially significant diseases?
  - 2. Who, in your opinion, is rated as a high-risk group for hepatitis B?
- 3. Do you think it is necessary to raise the awareness of the preventive vaccination of infectious diseases in the media more active and positively?
  - 4. Is it possible to protect yourself from hepatitis B by vaccination?
- 5. Do you know that a revaccination from hepatitis B can be done to people from high-risk groups when low levels of antibodies in blood are detected?

#### **Results**

The results of the survey of Russian and German students are shown in figures 1 and 2, respectively.

52,6% students from Russia consider that they have limited knowledge about the prevention of the socially significant infections. A similar opinion was expressed only by 18,2% respondents from Germany. Russian and German students' answers to the second question highlighted that the overwhelming majority of young people, in general, is well aware of the high-risk groups for hepatitis B. 18% of Germans and 21% of Russians are of the view that the vaccination against hepatitis B is ineffective. It should be pointed out that 100% of German students support the idea of active and positive publicity of the preventive vaccination issues. As a comparison, only 85% of Russians think the same way. An interesting fact is that the German youth is fairly well informed about a re-vaccination against hepatitis B (81,8%) in contrast to the Russian students (42%).

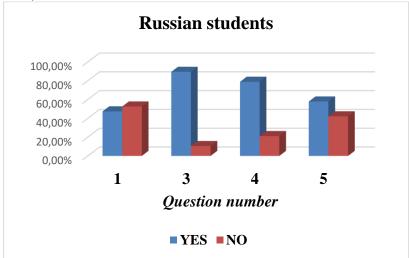


Figure 1. Responses of Russian students.

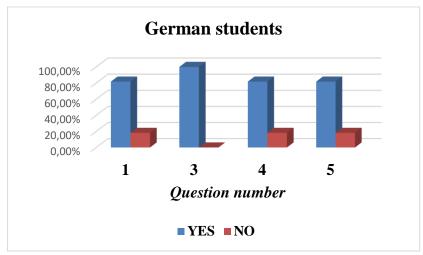


Figure 2. Responses of German students.

#### **Conclusions**

The study revealed many differences among young people from different countries. Dissimilarities concern not only the knowledge of particular characteristics of hepatitis B-virus but also attitude towards the prevention of this infection. Russian youth is less informed about the prevention of socially significant diseases but it should also be taken into account that this result is their subjective opinion. The actual knowledge may differ from what was assumed. Both groups have the percentage of those who don't consider the hepatitis B vaccine as an effective method of the prevention. In addition, it's evident that in Germany the knowledge about the details of the hepatitis B vaccine is higher than in Russia and therefore informing the public about this problem is better and more effective. Our research has shown the possible link between knowledge of hepatitis B as a socially significant infection, attitudes to the vaccination, and population morbidity. Consequently, there is a need to ensure comprehensive and high-quality awareness of the prevention of this disease among young people as a high-risk group.

# **List of references:**

- 1. Постановление Правительства РФ от 01.12.2004 № 715 (ред. от 31.01.2020) "Об утверждении перечня социально значимых заболеваний и перечня заболеваний, представляющих опасность для окружающих" // Собрание законодательства Российской Федерации. 2004. N 49.— С.4916
- 2.Руководство по адаптации программ иммунизации[Электронный ресурс] // Всемирная организация здравоохранения. 2013 URL: http://www.euro.who.int/\_\_data/assets/pdf\_file/0019/241345/The-Guide-to-Tailoring-Immunization-Programmes-TIP-Rus.pdf (дата обращения: 5.02.2020)
- 3. Global Hepatitis Report 2017 [Электронныйресурс] // Geneva: World Health Organization. 2017 URL:https://apps.who.int/iris/bitstream/handle/10665/255016/9789241565455-eng.pdf;jsessionid=C2A76179F334ACF7E92757E4415D4EE0?sequence=1 (датаобращения: 21.02.2020)
- 4. Sixty-ninth World Health Assembly: resolutions and decisions, annexes. [Электронный ресурс] // World Health Organization, Geneva. 23-28 May 2016

URL:https://apps.who.int/iris/bitstream/handle/10665/259134/A69\_REC1 en.pdf?seq uence=1&isAllowed=y (датаобращения: 21.02.2020)

УДК 613.634

## Стахеева Д.А.

# ВЛИЯНИЕ ХИМИЧЕСКОГО ФАКТОРА ПРОИЗВОДСТВЕННОЙ СРЕДЫ НА ГЕМАТОЛОГИЧЕСКИЕ ПОКАЗАТЕЛИ РАБОТАЮЩИХ ПРЕДПРИЯТИЯ АО «УРАЛЬСКИЙ ЗАВОД ТРАНСПОРТНОГО МАШИНОСТРОЕНИЯ»

Кафедра клинической лабораторной диагностики и бактериологии Уральский государственный медицинский университет Екатеринбург, Российская Федерация

# Stakheeva D.A.

# INFLUENCE OF THE CHEMICAL FACTOR OF THE PRODUCTION ENVIRONMENT ON THE HEMATOLOGICAL INDICATORS OF EMPLOYEES OF THE «URAL PLANT OF TRANSPORT ENGINEERING»

Department of clinical laboratory diagnostics and bacteriology Ural state medical University Yekaterinburg, Russian Federation

E-mail: darya\_stakheeva@mail.ru

**Аннотация.** Проведено гематологическое обследование работников машиностроительного производства АО «Уральский завод транспортного машиностроения». Проанализированы показатели гемограммы и лейкоцитограммы у работников производства. Установлены специфические и неспецифические изменения, выраженность которых зависит от производственного стажа работников.

**Annotation.** A hematological examination of the workers of machine-building production of JSC "Ural Transport Engineering Plant" was carried out. Hemogram and leukocytogram indices of production workers were analyzed. Specific and nonspecific changes are established, the severity of which depends on the production experience of employees.

**Ключевые слова:** химический фактор, гематологические показатели, машиностроительное производство.

**Key words:** chemical factor, hematological indicators, machine-building production.

## Введение

В настоящее время категория работающих представляет собой половину общей численности населения всего мира и вносит основной вклад в